ABSTRACT

A method, apparatus, and article of manufacture for detecting and preventing input data buffer overrun storing a security token containing a randomly generated data pattern in memory between an input data buffer and memory locations containing instruction address pointers. First one pushes all arguments to a function onto the stack data structure and pushes a return address onto the stack data structure for use in obtaining the memory address for the instruction to be executed upon completion of the function before it pushes onto the stack data structure a security token. This security token comprises a randomly generated data value. Next one allocates memory locations on the stack data structure for use as local variables within the function, completes the instructions within the function, retrieves the security token value from the stack data structure; and if the retrieved security token value is identical to the randomly generated data value, returns from the function using the return address stored on the stack data structure.